

Thermoset™ MP 110-10 Epoxy Encapsulant

Technical Data Sheet

OBSOLETE

Thermoset™ MP 110-10 encapsulant is a two-component epoxy system specifically designed for aviation bonding applications where good shock absorption and thermal cycling properties are required.

Features and Benefits:

Chemically Resistant – provides excellent resistance to chemicals.

Convenient – easy to use 1:1 mix ratio, by volume.

Application:

Mixing – Mix Thermoset MP 110-10 A resin with Thermoset MP 110-10 B hardener at a 1:1 ratio, by volume (90:100, by weight).

Applying – Apply epoxy encapsulant using handheld cartridges or automatic meter/mix/dispense equipment.

Curing – Initial cure is achieved after 2 hours at room temperature (25°C). Full cure and final properties are achieved after 7 days at room temperature, or by a post cure of one hour at 80°C.

Cleanup – Disposable containers and utensils are recommended when working with epoxies. However, when disposable materials are impractical, uncured encapsulant can be removed by cleaning equipment with solvent. Solvent-cleaned utensils should be thoroughly dried before reuse; any remaining solvent can contaminate the next mixture.

Shelf Life/Storage:

Shelf life of each component is one year when stored at 25°C in original, unopened container.

Typical Properties*

	MP 110-10 A Resin	MP 110-10 B Hardener	Mixed
Appearance	Black Liquid	Clear Paste	Black Paste
Viscosity, cP @ 25°C	32,000	130,000	75,000
Specific Gravity	1.06	1.17	1.12
Gel Time, minutes @ 25°C	–	–	40
Working Life, minutes @ 25°C	–	–	10

*Data is typical and not to be used for specification purposes.



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Typical Cured Properties*

Coefficient of Linear Thermal Expansion, ppm/°C	70
Glass Transition Temperature (T _g), °C by TMA	-34
Hardness Shore A	45
Moisture Absorption, % Boiling, 1 hour	< 1.5
Fuel Absorption, % Ref C fuel, 24 hours	< 0.1
Volume Resistivity, ohm-cm @ 25°C ASTM D 257	> 1 x 10 ¹³
Dielectric Strength, kV/mm (V/mil)	> 15.7 (> 400)

*Data is typical and not to be used for specification purposes.

Cautionary Information:

Before using this or any Parker LORD product, refer to the Safety Data Sheet (SDS) and label for safe use and handling instructions.

For industrial/commercial use only. Must be applied by trained personnel only. Not to be used in household applications. Not for consumer use.

Values stated in this document represent typical values as not all tests are run on each lot of material produced. For formalized product specifications for specific product end uses, contact the Customer Support Center.

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